Multiple Regression- FORCED-ENTRY HIERARCHICAL MODEL

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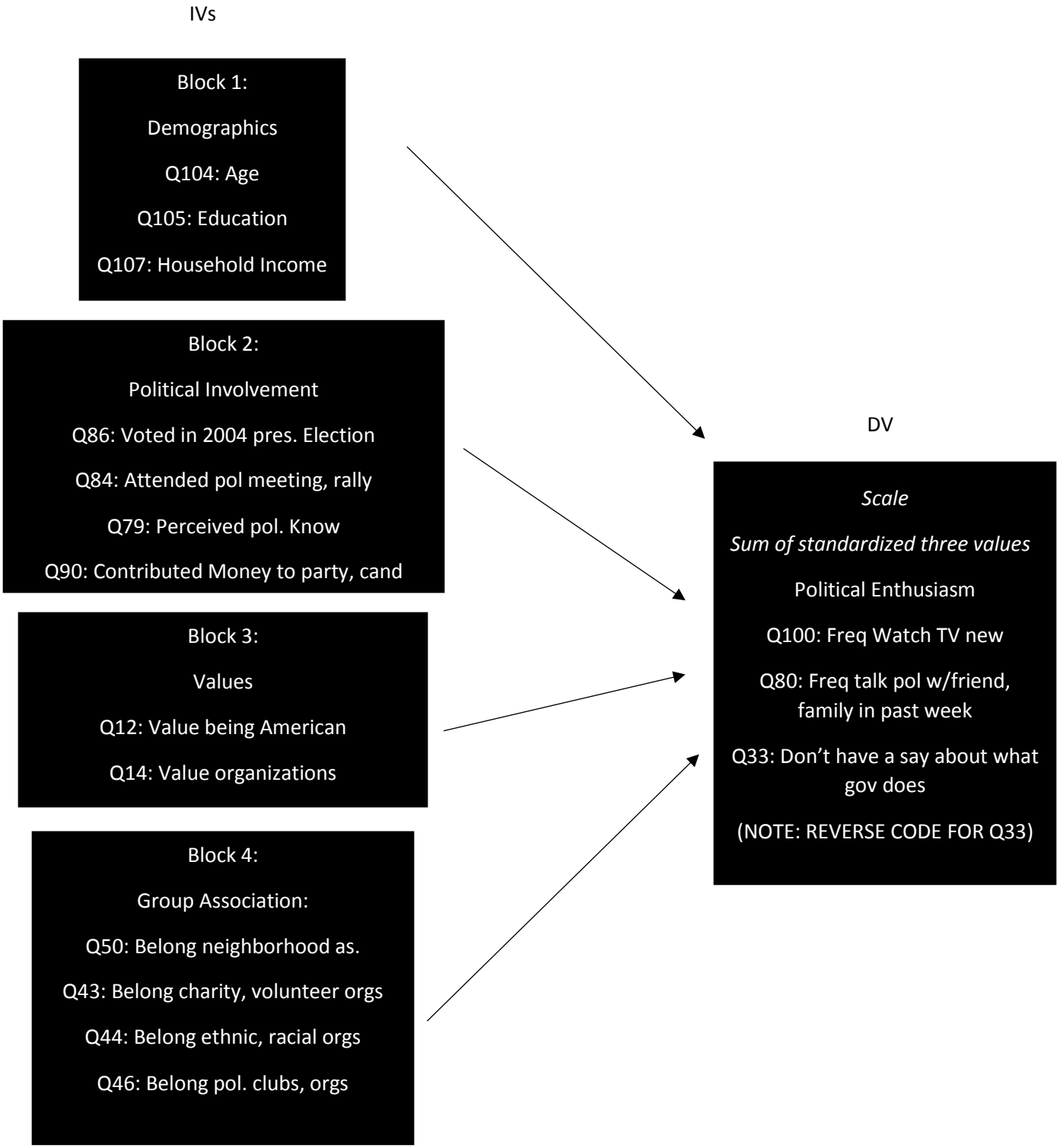
COM 631

Spring 2019

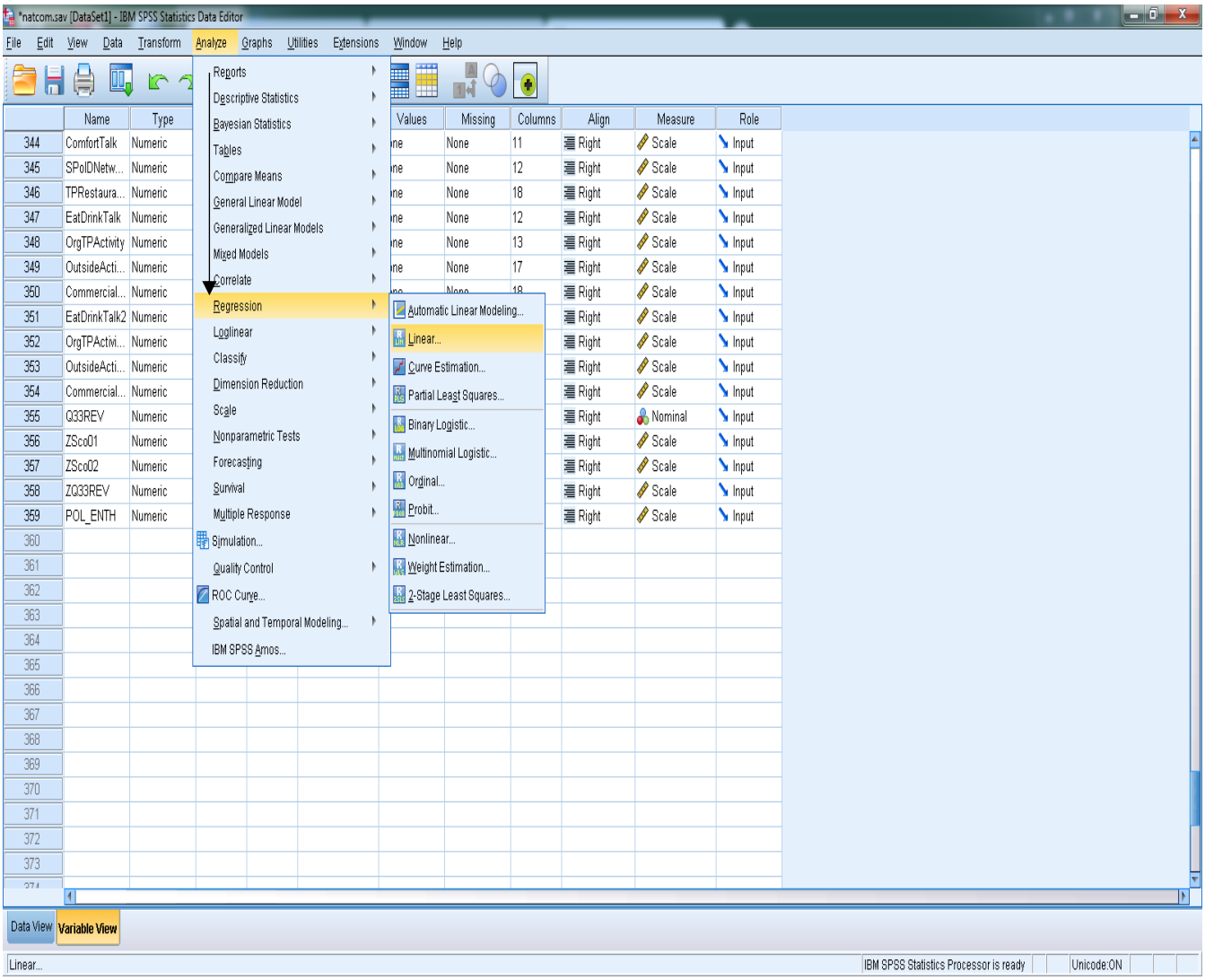
Data: National Community Study 2006

I. MODEL



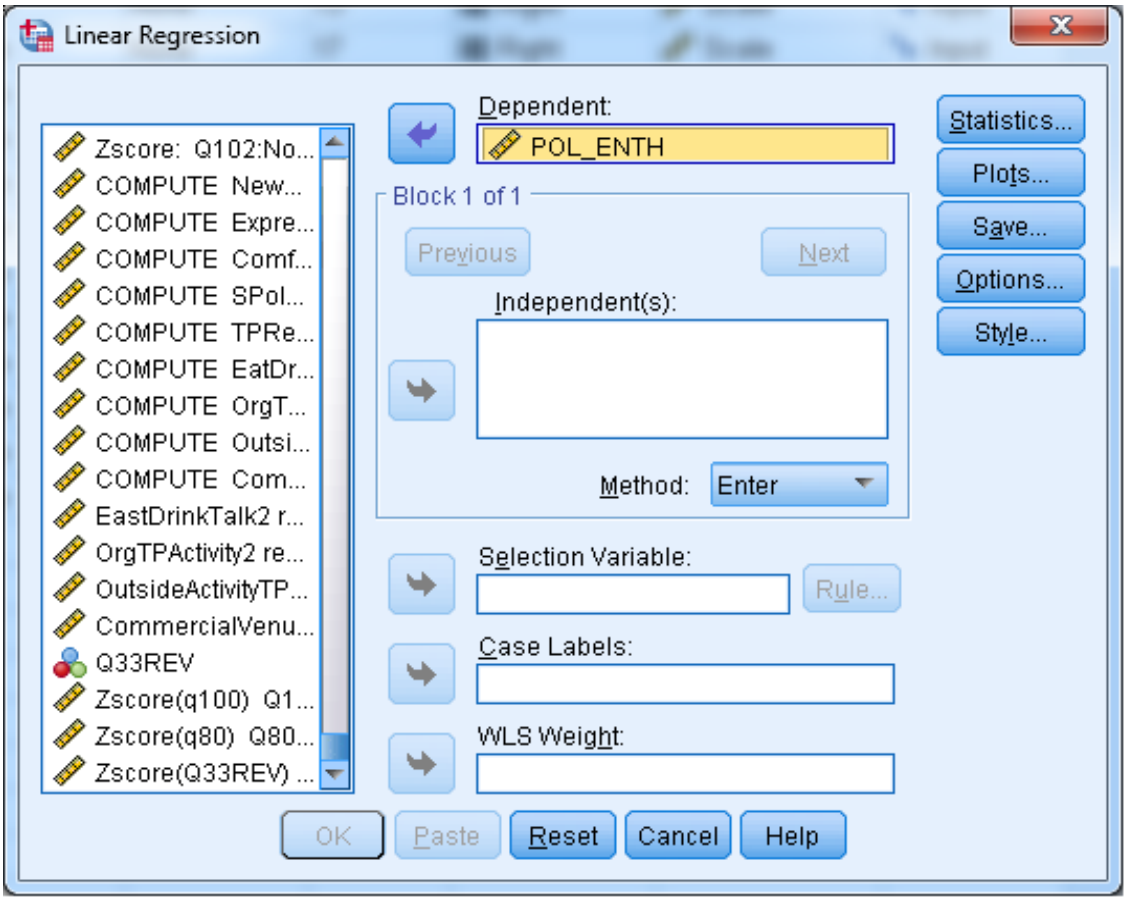
II. RUNNING SPSS

1. Analysis > Regression > Linear



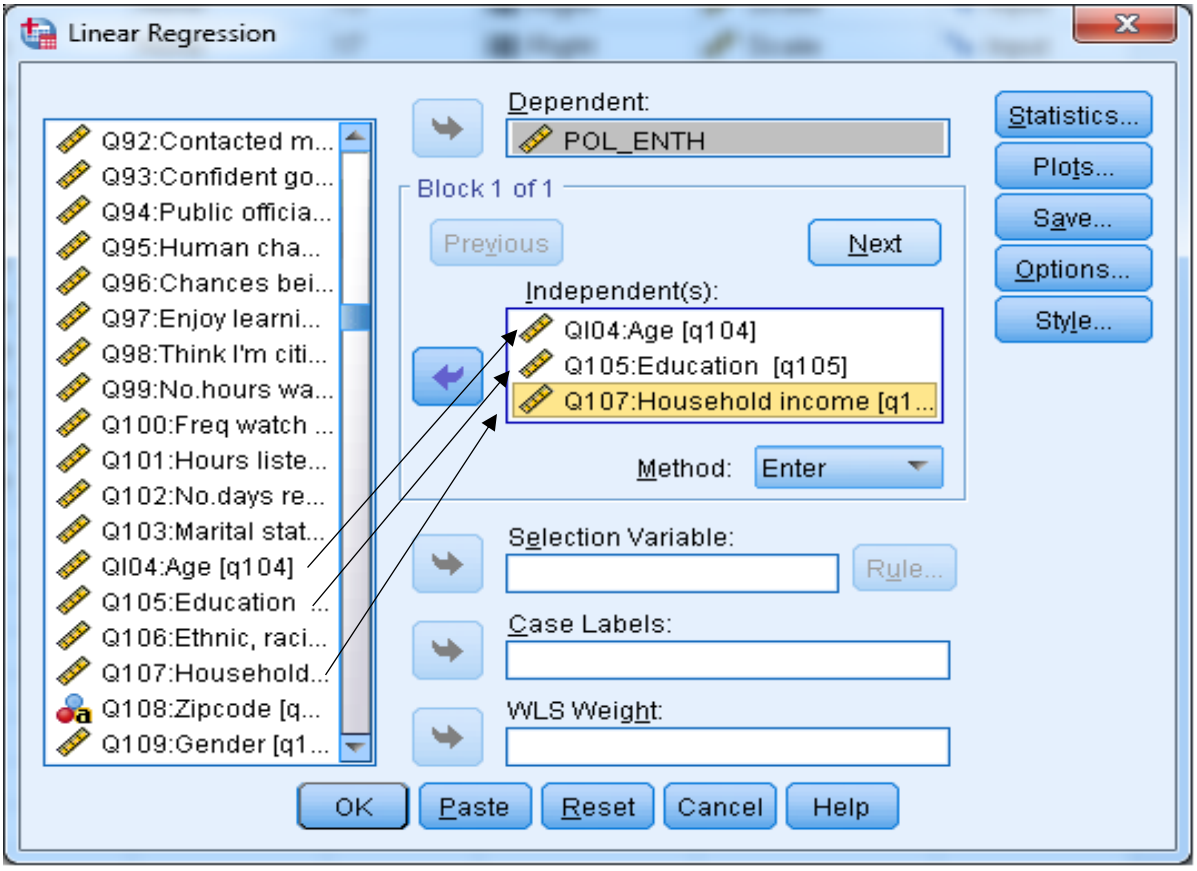
2) Select dependent variable: POL_ENTH

Click variable name > Arrow



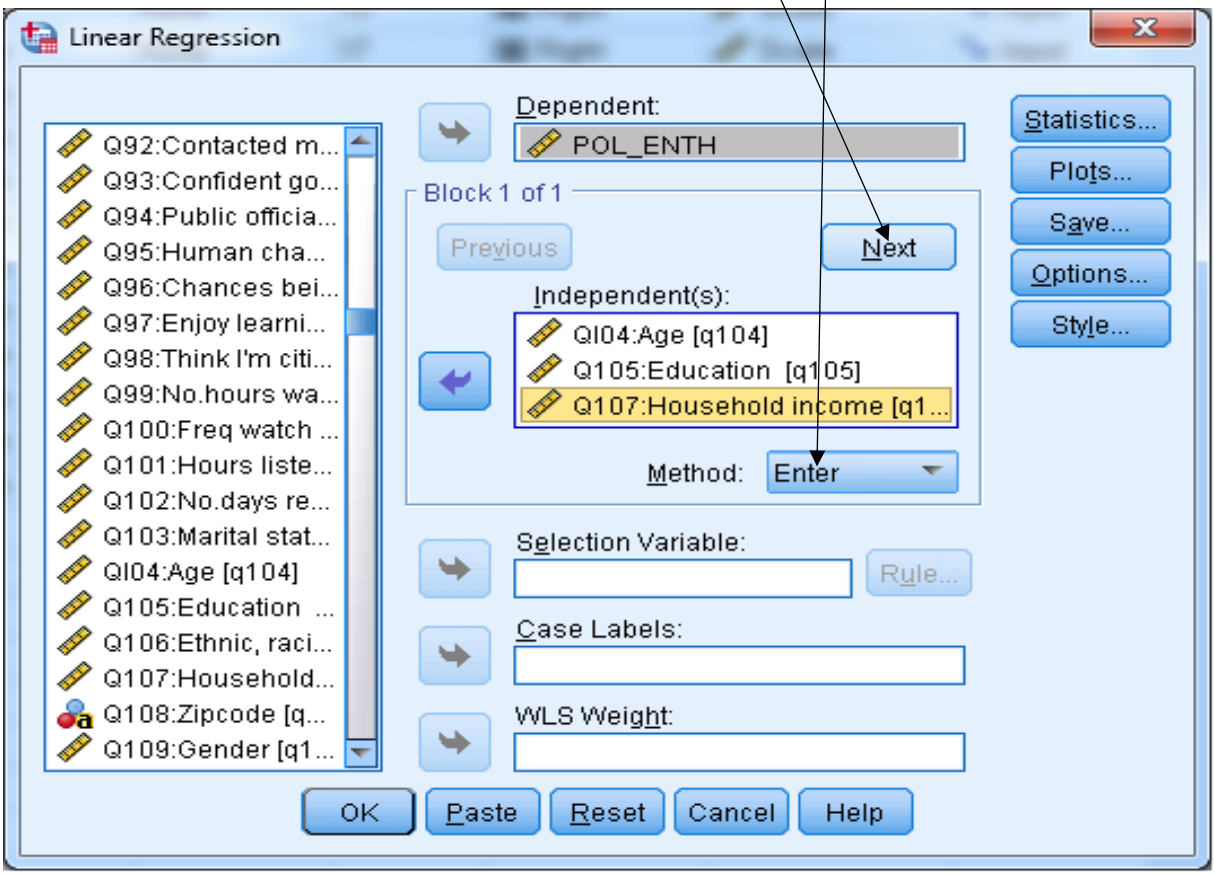
3) Select Independent variable(s) for block 1

Click Independent variable names > Arrow



4) Move to Block 2 by clicking “next”

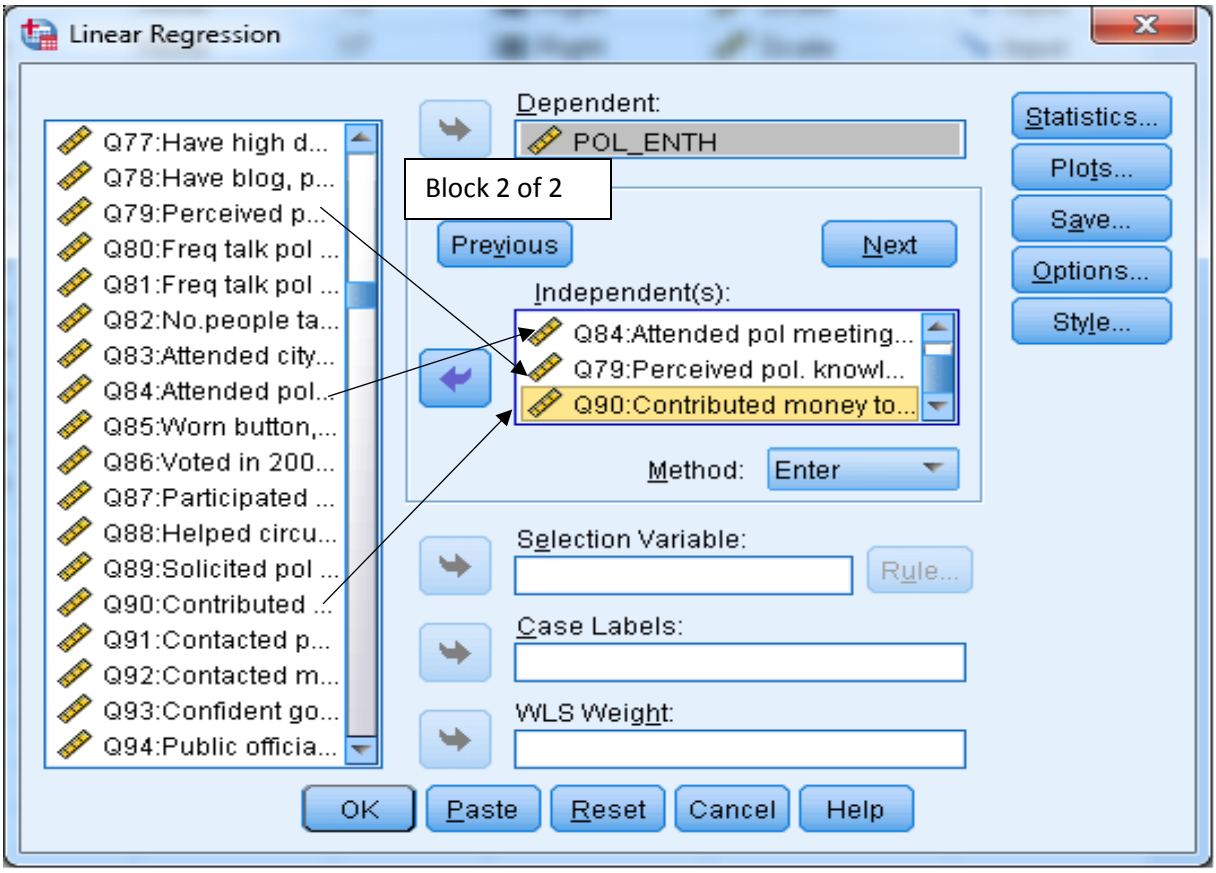
Note: Make sure your “Method” says “Enter.”



5) Select Independent Variables for Block 2

Click variable names arrow

Note: Screenshots for blocks 3 & 4 are not shown

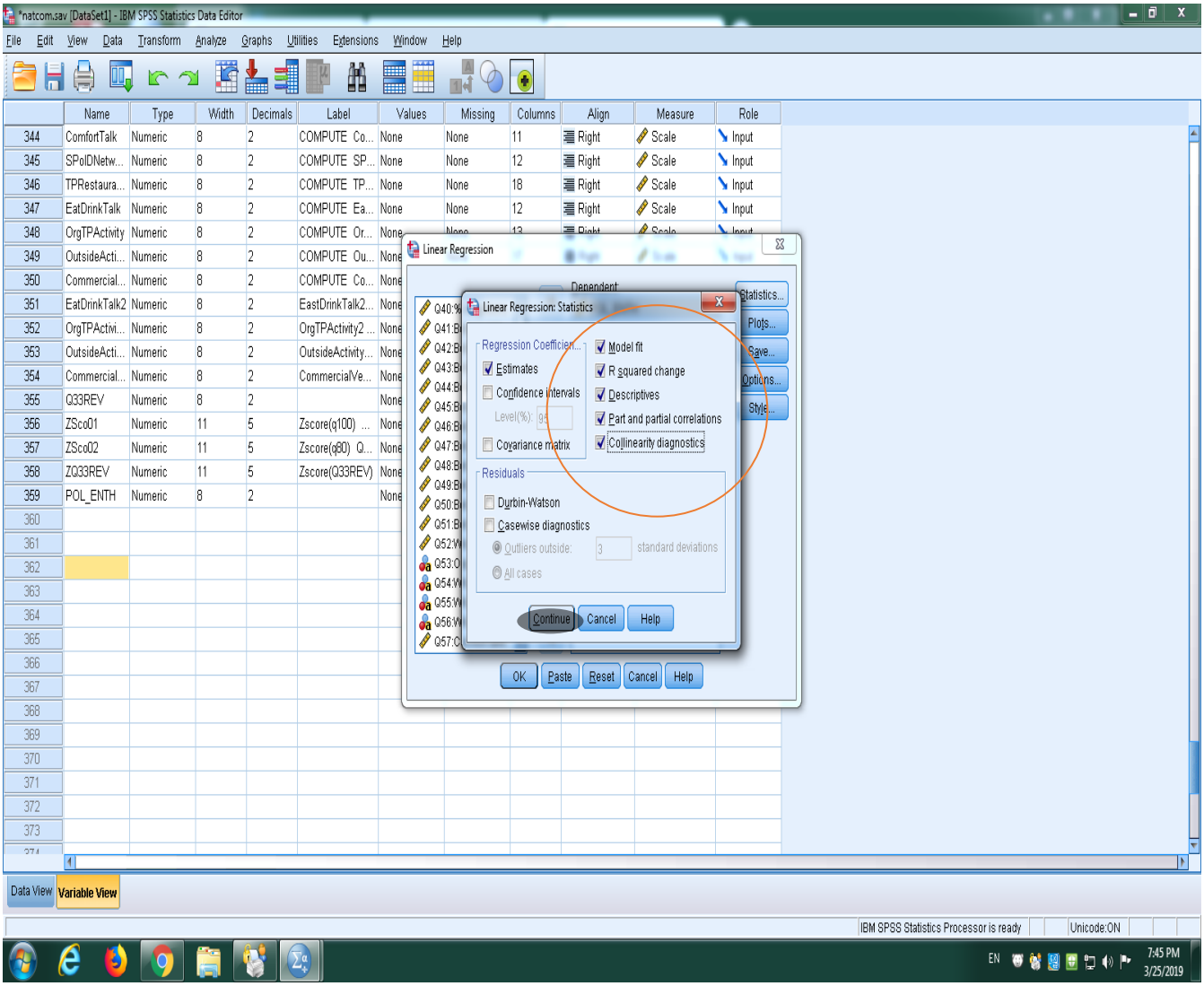


6) Click Statistics

Check Estimates, Model fit, R squared change, Descriptives, Part and partial correlations,

Collinearity diagnostics.

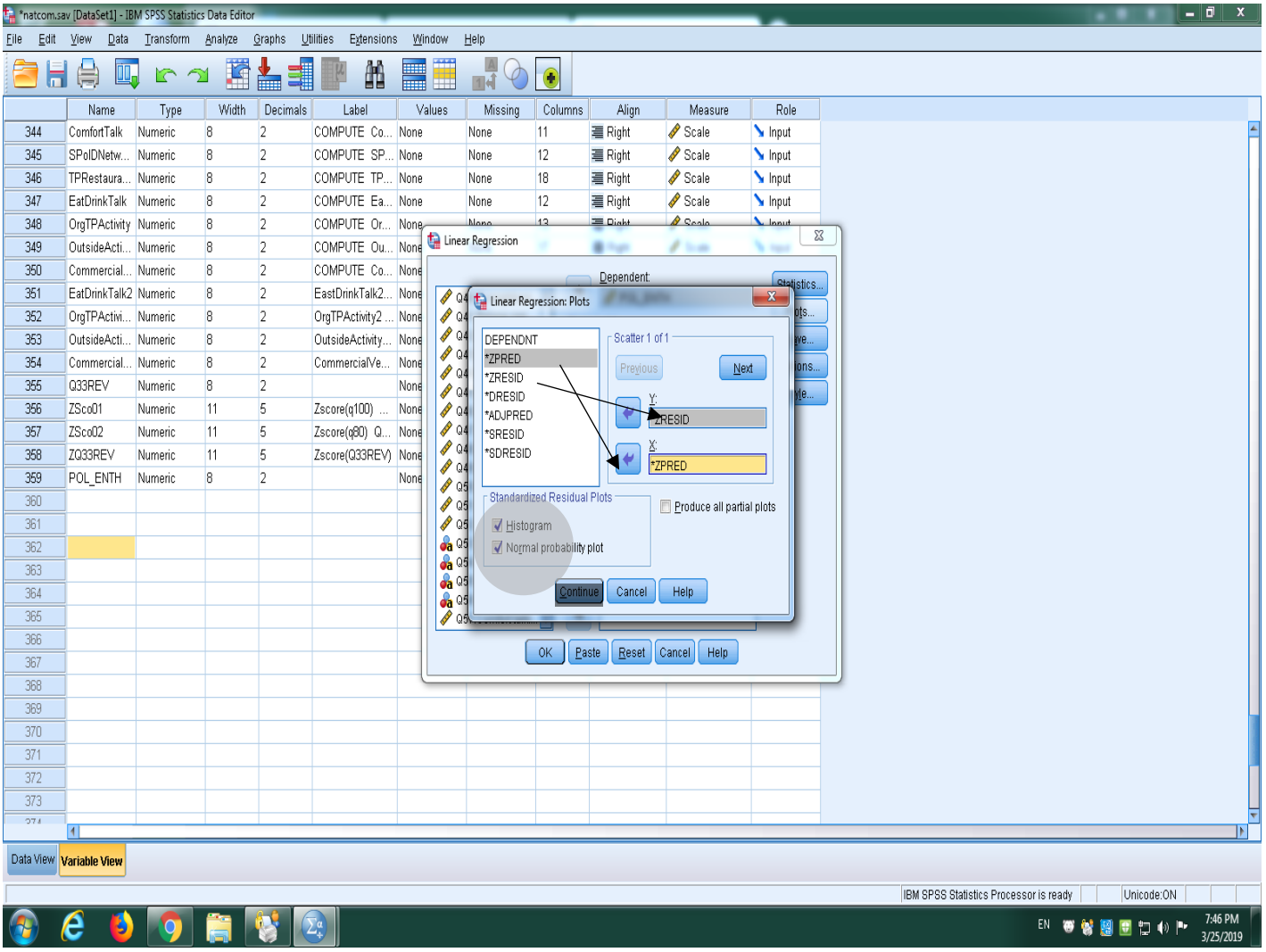
Click Continue



7) Click Plots

Click *ZRESID to Y and *ZPRED to X

Check Histogram and Normal probability plot



Click Continue > OK

IV. Tabling

Hierarchical Multiple Regression Predicting Political Enthusiasm

	Independent Variables	*r*	Final Beta	R^2Change	Total R^2
1.	**Demographics**			.153***	.153***
	Age	.254***	.159**		
	Education	.290***	.137*		
	Household Income	.192**	.015		
2.	**Political Involvement**			.099***	.252***
	Voted in 2004 Election	.209***	.020		
	Attended pol meeting, rally	.258***	.065		
	Perceived pol. Knowledge	.435***	.268***		
	Contributed Money to party, candidate	.233***	.014		
3.	**Values**			.004	.256***
	Value being American	.051	.077		
	Value organizations	.180**	.010		
4.	**Group Association**			.018	.274***
	Belong neighborhood as.	.166**	.040		
	Belong charity, volunteer orgs	.223***	.072		
	Belong ethnic, racial orgs	.148**	.074		
	Belong pol. clubs, orgs	.220***	.050		

R^2 = .274, Adjusted R^2 = .243, F = 8.941, df = 13,308, p < .001

Note: *p < .05; **p < .01; ***p < .001

V. The Write Up

Write Up of Results

In order to predict Political Enthusiasm, a four-block hierarchical multiple regression analysis was conducted. Multicollinearity was not a serious concern, as all tolerances were .607 and above. The analysis results indicates that 13 predictors explain 27.4% of the total variance of Political Enthusiasm (F (8.941) = 13,308, $p < .001$).

First, block 1, which included the Demographics of Age, Education, and Household Income, explained 15.3% of the total variance of Political Enthusiasm (F (3,318) = 19.088, $p < .001$). Two of the demographics were significant unique predictors: Age (final Beta = .159, $p < .05$), Education (final Beta = .137, $p < .05$). Income (final Beta = .015) was not significant. As a result, we concluded that demographics do play a significant role in predicting Political Enthusiasm, including when controlling for all of the other independent variables in all four blocks. All these independent variables in block 1 had a positive relationship with Political Enthusiasm. Block one also had the most significance. This means that the older a person is and the more educated, the more enthusiastic they will be about politics when all other variables in the full model are controlled for.

Second, block 2, Political Involvement (voted in 2004 presidential election, attended political meeting/rally, perceived political knowledge, and contributed money to a party/candidate), explained an additional 9.9% of the total variance of Political Enthusiasm (F (4,314) = 10.381, $p = .001$). Perceived Political Knowledge was a significant (final Beta = .268)

The third block, Values (value being American, value organizations), explained only 0.4% of total variance of Political Enthusiasm (F (2,312) = .915, ns). Value being an American was surprisingly not a significant factor to Political Enthusiasm.

The fourth block, Group Association (belong to neighborhood association, belong to charity or volunteer organizations, belong to ethnic/racial organizations, and belong to political clubs or organizations), explained only 1.8% of total variance of Political Enthusiasm (F (4,308) = 1.913, ns).

Overall, this analysis included four separate blocks of predictor variables that as a whole did contribute a significant amount of variance to the prediction of Political Enthusiasm as indicated by the significant R2 for the total equation. Block 1 (Demographics) and Block 2 (Political Involvement) both contributed a significant amount of variance to the prediction of Political Enthusiasm as indicated by significant R2 change figures for each block. Blocks 3 and 4 did not contribute a significant amount of variance to the prediction of Political Enthusiasm. Also, the Beta coefficients indicated that when controlling for the impact of all other variables in the final equation, there are three independent variables that maintained significant unique contributions toward Political Enthusiasm. This is indicated by three significant final Betas. Political Enthusiasm is predicted by age, education, and perceived political knowledge. Two of those variables are found in Block 1.

```
RECODE q33 (0=10) (1=9) (2=8) (3=7) (4=6) (5=5) (6=4) (7=3) (8=2) (9=1) (10=0)
 INTO Q33REV.
EXECUTE.
RELIABILITY
  /VARIABLES=Q33REV q100 q80
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA
  /STATISTICS=DESCRIPTIVE SCALE CORR
  /SUMMARY=MEANS VARIANCE COV CORR.
```

Reliability

Notes

Output Created		25-MAR-2019 19:30:15
Comments		
Input	Data	C:\Users\2743075\Documents\natcom.sav
	Active Dataset	DataSet1
	File Label	CP05
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	477
	Matrix Input	
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.

Notes

Syntax		RELIABILITY /VARIABLES=Q33REV q100 q80 /SCALE('ALL VARIABLES') ALL /MODEL=ALPHA /STATISTICS=DESCRIPTIVE SCALE CORR /SUMMARY=MEANS VARIANCE COV CORR.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.09

[DataSet1] C:\Users\2743075\Documents\natcom.sav

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	429	89.9
	Excluded[a]	48	10.1
	Total	477	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.013	.048	3

Item Statistics

	Mean	Std. Deviation	N
Q33REV	5.1375	3.39354	429
Q100:Freq watch TV news	4.2587	1.82933	429
Q80:Freq talk pol w/friends, family in past week	1.5594	1.25092	429

Inter-Item Correlation Matrix

	Q33REV	Q100:Freq watch TV news	Q80:Freq talk pol w/friends, family in past week
Q33REV	1.000	-.048	.077
Q100:Freq watch TV news	-.048	1.000	.021
Q80:Freq talk pol w/friends, family in past week	.077	.021	1.000

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance
Item Means	3.652	1.559	5.138	3.578	3.294	3.477
Item Variances	5.476	1.565	11.516	9.951	7.359	28.158
Inter-Item Covariances	.025	-.300	.325	.624	-1.084	.078
Inter-Item Correlations	.017	-.048	.077	.125	-1.585	.003

Summary Item Statistics

	N of Items
Item Means	3
Item Variances	3
Inter-Item Covariances	3
Inter-Item Correlations	3

Scale Statistics

Mean	Variance	Std. Deviation	N of Items
10.9557	16.575	4.07126	3

```
DESCRIPTIVES VARIABLES=q100 q80 Q33REV
  /SAVE
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		25-MAR-2019 19:31:15
Comments		
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	477
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=q100 q80 Q33REV /SAVE /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.21
Variables Created or Modified	ZSco01	Zscore(q100) Q100:Freq watch TV news
	ZSco02	Zscore(q80) Q80:Freq talk pol w/friends, family in past week
	ZQ33REV	Zscore(Q33REV)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Q100:Freq watch TV news	434	0	6	4.27	1.822
Q80:Freq talk pol w/friends, family in past week	448	0	4	1.56	1.252
Q33REV	456	.00	10.00	5.1162	3.41517
Valid N (listwise)	429				

```
 COMPUTE POL_ENTH=ZSco01 +ZSco02 + ZQ33REV.
EXECUTE.
REGRESSION
  /DESCRIPTIVES MEAN STDDEV CORR SIG N
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT POL_ENTH
  /METHOD=ENTER q104 q105 q107
  /METHOD=ENTER q86 q84 q79 q90
  /METHOD=ENTER q12 q14
  /METHOD=ENTER q50 q43 q44 q46
  /SCATTERPLOT=(*ZRESID ,*ZPRED)
  /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
```

Regression

Notes

Output Created		25-MAR-2019 19:47:19
Comments		
Input	Data	C:\Users\2743075\Documents\natcom.sav
	Active Dataset	DataSet1
	File Label	CP05
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	477
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /DESCRIPTIVES MEAN STDDEV CORR SIG N /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE ZPP /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT POL_ENTH /METHOD=ENTER q104 q105 q107 /METHOD=ENTER q86 q84 q79 q90 /METHOD=ENTER q12 q14 /METHOD=ENTER q50 q43 q44 q46 /SCATTERPLOT=(*ZRESID ,*ZPRED) /RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID).
Resources	Processor Time	00:00:01.69
	Elapsed Time	00:00:01.49

Notes

Memory Required	32704 bytes
Additional Memory Required for Residual Plots	488 bytes

Descriptive Statistics

	Mean	Std. Deviation	N
POL_ENTH	.0142	1.76389	322
Ql04:Age	4.31	1.612	322
Q105:Education	4.07	1.328	322
Q107:Household income	4.73	2.236	322
Q86:Voted in 2004 presidential election	.81	.390	322
Q84:Attended pol meeting, rally	.30	.458	322
Q79:Perceived pol. knowledge	6.10	2.727	322
Q90:Contributed money to party,candidate	.24	.427	322
Q12:Value being American	8.29	2.681	322
Q14:Value organizations	5.15	3.339	322
Q50:Belong neighborhood associations	.20	.402	322
Q43:Belong charity, volunteer orgs	.43	.496	322
Q44:Belong ethnic, racial orgs	.10	.300	322
Q46:Belong pol. clubs,orgs	.15	.360	322

Correlations

		POL_ENTH	Ql04:Age	Q105: Education
Pearson Correlation	POL_ENTH	1.000	.254	.290
	Ql04:Age	.254	1.000	-.008
	Q105:Education	.290	-.008	1.000
	Q107:Household income	.192	-.017	.519
	Q86:Voted in 2004 presidential election	.209	.126	.304
	Q84:Attended pol meeting, rally	.258	.057	.224
	Q79:Perceived pol. knowledge	.435	.249	.367
	Q90:Contributed money to party,candidate	.233	.164	.210
	Q12:Value being American	.051	.257	-.132
	Q14:Value organizations	.180	.185	.218
	Q50:Belong neighborhood associations	.166	-.038	.170
	Q43:Belong charity, volunteer orgs	.223	.079	.239
	Q44:Belong ethnic, racial orgs	.148	-.089	.060
	Q46:Belong pol. clubs,orgs	.220	.059	.081
Sig. (1-tailed)	POL_ENTH	.	.000	.000
	Ql04:Age	.000	.	.444
	Q105:Education	.000	.444	.
	Q107:Household income	.000	.381	.000
	Q86:Voted in 2004 presidential election	.000	.012	.000
	Q84:Attended pol meeting, rally	.000	.155	.000
	Q79:Perceived pol. knowledge	.000	.000	.000
	Q90:Contributed money to party,candidate	.000	.002	.000

Correlations

		Q107: Household income	Q86:Voted in 2004 presidential election	Q84:Attended pol meeting, rally
Pearson Correlation	POL_ENTH	.192	.209	.258
	Ql04:Age	-.017	.126	.057
	Q105:Education	.519	.304	.224
	Q107:Household income	1.000	.296	.172
	Q86:Voted in 2004 presidential election	.296	1.000	.242
	Q84:Attended pol meeting, rally	.172	.242	1.000
	Q79:Perceived pol. knowledge	.263	.235	.322
	Q90:Contributed money to party,candidate	.181	.250	.462
	Q12:Value being American	-.052	.097	-.152
	Q14:Value organizations	.078	.148	.089
	Q50:Belong neighborhood associations	.188	.141	.247
	Q43:Belong charity, volunteer orgs	.152	.159	.213
	Q44:Belong ethnic, racial orgs	.003	.106	.237
	Q46:Belong pol. clubs,orgs	.062	.136	.423
Sig. (1-tailed)	POL_ENTH	.000	.000	.000
	Ql04:Age	.381	.012	.155
	Q105:Education	.000	.000	.000
	Q107:Household income	.	.000	.001
	Q86:Voted in 2004 presidential election	.000	.	.000
	Q84:Attended pol meeting, rally	.001	.000	.
	Q79:Perceived pol. knowledge	.000	.000	.000
	Q90:Contributed money to party,candidate	.001	.000	.000

Correlations

		Q79:Perceived pol. knowledge	Q90: Contributed money to party, candidate	Q12:Value being American
Pearson Correlation	POL_ENTH	.435	.233	.051
	Ql04:Age	.249	.164	.257
	Q105:Education	.367	.210	-.132
	Q107:Household income	.263	.181	-.052
	Q86:Voted in 2004 presidential election	.235	.250	.097
	Q84:Attended pol meeting, rally	.322	.462	-.152
	Q79:Perceived pol. knowledge	1.000	.326	-.016
	Q90:Contributed money to party,candidate	.326	1.000	-.058
	Q12:Value being American	-.016	-.058	1.000
	Q14:Value organizations	.167	.086	.188
	Q50:Belong neighborhood associations	.223	.172	-.197
	Q43:Belong charity, volunteer orgs	.188	.114	-.118
	Q44:Belong ethnic, racial orgs	.106	.106	-.184
	Q46:Belong pol. clubs,orgs	.254	.391	-.124
Sig. (1-tailed)	POL_ENTH	.000	.000	.181
	Ql04:Age	.000	.002	.000
	Q105:Education	.000	.000	.009
	Q107:Household income	.000	.001	.174
	Q86:Voted in 2004 presidential election	.000	.000	.041
	Q84:Attended pol meeting, rally	.000	.000	.003
	Q79:Perceived pol. knowledge	.	.000	.387
	Q90:Contributed money to party,candidate	.000	.	.148

Correlations

		Q14:Value organizations	Q50:Belong neighborhood associations	Q43:Belong charity, volunteer orgs
Pearson Correlation	POL_ENTH	.180	.166	.223
	Ql04:Age	.185	-.038	.079
	Q105:Education	.218	.170	.239
	Q107:Household income	.078	.188	.152
	Q86:Voted in 2004 presidential election	.148	.141	.159
	Q84:Attended pol meeting, rally	.089	.247	.213
	Q79:Perceived pol. knowledge	.167	.223	.188
	Q90:Contributed money to party,candidate	.086	.172	.114
	Q12:Value being American	.188	-.197	-.118
	Q14:Value organizations	1.000	-.013	.358
	Q50:Belong neighborhood associations	-.013	1.000	.155
	Q43:Belong charity, volunteer orgs	.358	.155	1.000
	Q44:Belong ethnic, racial orgs	.131	.221	.276
	Q46:Belong pol. clubs,orgs	.121	.261	.259
Sig. (1-tailed)	POL_ENTH	.001	.001	.000
	Ql04:Age	.000	.246	.079
	Q105:Education	.000	.001	.000
	Q107:Household income	.081	.000	.003
	Q86:Voted in 2004 presidential election	.004	.006	.002
	Q84:Attended pol meeting, rally	.056	.000	.000
	Q79:Perceived pol. knowledge	.001	.000	.000
	Q90:Contributed money to party,candidate	.061	.001	.020

Correlations

		Q44:Belong ethnic, racial orgs	Q46:Belong pol. clubs,orgs
Pearson Correlation	POL_ENTH	.148	.220
	Ql04:Age	-.089	.059
	Q105:Education	.060	.081
	Q107:Household income	.003	.062
	Q86:Voted in 2004 presidential election	.106	.136
	Q84:Attended pol meeting, rally	.237	.423
	Q79:Perceived pol. knowledge	.106	.254
	Q90:Contributed money to party,candidate	.106	.391
	Q12:Value being American	-.184	-.124
	Q14:Value organizations	.131	.121
	Q50:Belong neighborhood associations	.221	.261
	Q43:Belong charity, volunteer orgs	.276	.259
	Q44:Belong ethnic, racial orgs	1.000	.322
	Q46:Belong pol. clubs,orgs	.322	1.000
Sig. (1-tailed)	POL_ENTH	.004	.000
	Ql04:Age	.055	.147
	Q105:Education	.143	.075
	Q107:Household income	.482	.133
	Q86:Voted in 2004 presidential election	.029	.007
	Q84:Attended pol meeting, rally	.000	.000
	Q79:Perceived pol. knowledge	.029	.000
	Q90:Contributed money to party,candidate	.029	.000

Correlations

		POL_ENTH	Ql04:Age	Q105: Education
	Q12:Value being American	.181	.000	.009
	Q14:Value organizations	.001	.000	.000
	Q50:Belong neighborhood associations	.001	.246	.001
	Q43:Belong charity, volunteer orgs	.000	.079	.000
	Q44:Belong ethnic, racial orgs	.004	.055	.143
	Q46:Belong pol. clubs,orgs	.000	.147	.075
N	POL_ENTH	322	322	322
	Ql04:Age	322	322	322
	Q105:Education	322	322	322
	Q107:Household income	322	322	322
	Q86:Voted in 2004 presidential election	322	322	322
	Q84:Attended pol meeting, rally	322	322	322
	Q79:Perceived pol. knowledge	322	322	322
	Q90:Contributed money to party,candidate	322	322	322
	Q12:Value being American	322	322	322
	Q14:Value organizations	322	322	322
	Q50:Belong neighborhood associations	322	322	322
	Q43:Belong charity, volunteer orgs	322	322	322
	Q44:Belong ethnic, racial orgs	322	322	322
	Q46:Belong pol. clubs,orgs	322	322	322

Correlations

		Q107: Household income	Q86:Voted in 2004 presidential election	Q84:Attended pol meeting, rally
	Q12:Value being American	.174	.041	.003
	Q14:Value organizations	.081	.004	.056
	Q50:Belong neighborhood associations	.000	.006	.000
	Q43:Belong charity, volunteer orgs	.003	.002	.000
	Q44:Belong ethnic, racial orgs	.482	.029	.000
	Q46:Belong pol. clubs,orgs	.133	.007	.000
N	POL_ENTH	322	322	322
	Ql04:Age	322	322	322
	Q105:Education	322	322	322
	Q107:Household income	322	322	322
	Q86:Voted in 2004 presidential election	322	322	322
	Q84:Attended pol meeting, rally	322	322	322
	Q79:Perceived pol. knowledge	322	322	322
	Q90:Contributed money to party,candidate	322	322	322
	Q12:Value being American	322	322	322
	Q14:Value organizations	322	322	322
	Q50:Belong neighborhood associations	322	322	322
	Q43:Belong charity, volunteer orgs	322	322	322
	Q44:Belong ethnic, racial orgs	322	322	322
	Q46:Belong pol. clubs,orgs	322	322	322

Correlations

		Q79:Perceived pol. knowledge	Q90: Contributed money to party, candidate	Q12:Value being American
	Q12:Value being American	.387	.148	.
	Q14:Value organizations	.001	.061	.000
	Q50:Belong neighborhood associations	.000	.001	.000
	Q43:Belong charity, volunteer orgs	.000	.020	.017
	Q44:Belong ethnic, racial orgs	.029	.029	.000
	Q46:Belong pol. clubs,orgs	.000	.000	.013
N	POL_ENTH	322	322	322
	Ql04:Age	322	322	322
	Q105:Education	322	322	322
	Q107:Household income	322	322	322
	Q86:Voted in 2004 presidential election	322	322	322
	Q84:Attended pol meeting, rally	322	322	322
	Q79:Perceived pol. knowledge	322	322	322
	Q90:Contributed money to party,candidate	322	322	322
	Q12:Value being American	322	322	322
	Q14:Value organizations	322	322	322
	Q50:Belong neighborhood associations	322	322	322
	Q43:Belong charity, volunteer orgs	322	322	322
	Q44:Belong ethnic, racial orgs	322	322	322
	Q46:Belong pol. clubs,orgs	322	322	322

Correlations

		Q14:Value organizations	Q50:Belong neighborhood associations	Q43:Belong charity, volunteer orgs
	Q12:Value being American	.000	.000	.017
	Q14:Value organizations	.	.407	.000
	Q50:Belong neighborhood associations	.407	.	.003
	Q43:Belong charity, volunteer orgs	.000	.003	.
	Q44:Belong ethnic, racial orgs	.009	.000	.000
	Q46:Belong pol. clubs,orgs	.015	.000	.000
N	POL_ENTH	322	322	322
	Ql04:Age	322	322	322
	Q105:Education	322	322	322
	Q107:Household income	322	322	322
	Q86:Voted in 2004 presidential election	322	322	322
	Q84:Attended pol meeting, rally	322	322	322
	Q79:Perceived pol. knowledge	322	322	322
	Q90:Contributed money to party,candidate	322	322	322
	Q12:Value being American	322	322	322
	Q14:Value organizations	322	322	322
	Q50:Belong neighborhood associations	322	322	322
	Q43:Belong charity, volunteer orgs	322	322	322
	Q44:Belong ethnic, racial orgs	322	322	322
	Q46:Belong pol. clubs,orgs	322	322	322

Correlations

		Q44:Belong ethnic, racial orgs	Q46:Belong pol. clubs,orgs
	Q12:Value being American	.000	.013
	Q14:Value organizations	.009	.015
	Q50:Belong neighborhood associations	.000	.000
	Q43:Belong charity, volunteer orgs	.000	.000
	Q44:Belong ethnic, racial orgs	.	.000
	Q46:Belong pol. clubs,orgs	.000	.
N	POL_ENTH	322	322
	Ql04:Age	322	322
	Q105:Education	322	322
	Q107:Household income	322	322
	Q86:Voted in 2004 presidential election	322	322
	Q84:Attended pol meeting, rally	322	322
	Q79:Perceived pol. knowledge	322	322
	Q90:Contributed money to party,candidate	322	322
	Q12:Value being American	322	322
	Q14:Value organizations	322	322
	Q50:Belong neighborhood associations	322	322
	Q43:Belong charity, volunteer orgs	322	322
	Q44:Belong ethnic, racial orgs	322	322
	Q46:Belong pol. clubs,orgs	322	322

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Q107: Household income, Ql04: Age, Q105: Education[b]	.	Enter
2	Q84:Attended pol meeting, rally, Q86: Voted in 2004 presidential election, Q90: Contributed money to party, candidate, Q79: Perceived pol. knowledge[b]	.	Enter
3	Q14:Value organizations, Q12:Value being American[b]	.	Enter
4	Q44:Belong ethnic, racial orgs, Q50: Belong neighborhood associations, Q43:Belong charity, volunteer orgs, Q46: Belong pol. clubs,orgs[b]	.	Enter

a. Dependent Variable: POL_ENTH

b. All requested variables entered.

Model Summary[e]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics		
					R Square Change	F Change	df1
1	.391[a]	.153	.145	1.63138	.153	19.088	3
2	.502[b]	.252	.235	1.54289	.099	10.381	4
3	.506[c]	.256	.234	1.54331	.004	.915	2
4	.523[d]	.274	.243	1.53435	.018	1.913	4

Model Summary[e]

Model	Change Statistics	
	df2	Sig. F Change
1	318	.000
2	314	.000
3	312	.401
4	308	.108

a. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education

b. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge

c. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge, Q14:Value organizations, Q12:Value being American

d. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge, Q14:Value organizations, Q12:Value being American, Q44:Belong ethnic, racial orgs, Q50:Belong neighborhood associations, Q43:Belong charity, volunteer orgs, Q46:Belong pol. clubs,orgs

e. Dependent Variable: POL_ENTH

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152.405	3	50.802	19.088	.000[b]
	Residual	846.323	318	2.661		
	Total	998.728	321			
2	Regression	251.250	7	35.893	15.078	.000[c]
	Residual	747.479	314	2.381		
	Total	998.728	321			
3	Regression	255.609	9	28.401	11.924	.000[d]
	Residual	743.119	312	2.382		
	Total	998.728	321			
4	Regression	273.627	13	21.048	8.941	.000[e]
	Residual	725.101	308	2.354		
	Total	998.728	321			

a. Dependent Variable: POL_ENTH

b. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education

c. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge

d. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge, Q14:Value organizations, Q12:Value being American

e. Predictors: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge, Q14:Value organizations, Q12:Value being American, Q44:Belong ethnic, racial orgs, Q50:Belong neighborhood associations, Q43:Belong charity, volunteer orgs, Q46:Belong pol. clubs,orgs

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.835	.387		-7.317	.000
	Ql04:Age	.282	.056	.258	4.988	.000
	Q105:Education	.345	.080	.260	4.304	.000
	Q107:Household income	.048	.048	.061	1.017	.310
2	(Constant)	-3.015	.381		-7.917	.000
	Ql04:Age	.185	.056	.169	3.285	.001
	Q105:Education	.183	.080	.138	2.277	.023
	Q107:Household income	.010	.046	.013	.217	.829
	Q86:Voted in 2004 presidential election	.198	.243	.044	.818	.414
	Q84:Attended pol meeting, rally	.392	.219	.102	1.791	.074
	Q79:Perceived pol. knowledge	.187	.037	.289	5.050	.000
	Q90:Contributed money to party,candidate	.088	.236	.021	.374	.708
3	(Constant)	-3.230	.452		-7.153	.000
	Ql04:Age	.164	.058	.150	2.812	.005
	Q105:Education	.176	.083	.133	2.133	.034
	Q107:Household income	.012	.046	.015	.261	.795
	Q86:Voted in 2004 presidential election	.155	.246	.034	.632	.528
	Q84:Attended pol meeting, rally	.413	.221	.107	1.865	.063
	Q79:Perceived pol. knowledge	.186	.037	.287	5.006	.000
	Q90:Contributed money to party,candidate	.098	.236	.024	.414	.679
	Q12:Value being American	.027	.035	.040	.759	.448
	Q14:Value organizations	.026	.028	.050	.960	.338
4	(Constant)	-3.419	.456		-7.502	.000
	Ql04:Age	.173	.059	.159	2.959	.003
	Q105:Education	.182	.083	.137	2.198	.029
	Q107:Household income	.012	.046	.015	.252	.801
	Q86:Voted in 2004 presidential election	.090	.246	.020	.367	.714

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)					
	Ql04:Age	.254	.269	.258	1.000	1.000
	Q105:Education	.290	.235	.222	.731	1.368
	Q107:Household income	.192	.057	.052	.731	1.368
2	(Constant)					
	Ql04:Age	.254	.182	.160	.902	1.108
	Q105:Education	.290	.127	.111	.652	1.535
	Q107:Household income	.192	.012	.011	.702	1.424
	Q86:Voted in 2004 presidential election	.209	.046	.040	.828	1.208
	Q84:Attended pol meeting, rally	.258	.101	.087	.737	1.357
	Q79:Perceived pol. knowledge	.435	.274	.247	.727	1.376
	Q90:Contributed money to party,candidate	.233	.021	.018	.728	1.373
3	(Constant)					
	Ql04:Age	.254	.157	.137	.835	1.198
	Q105:Education	.290	.120	.104	.617	1.622
	Q107:Household income	.192	.015	.013	.700	1.429
	Q86:Voted in 2004 presidential election	.209	.036	.031	.809	1.236
	Q84:Attended pol meeting, rally	.258	.105	.091	.721	1.387
	Q79:Perceived pol. knowledge	.435	.273	.244	.725	1.379
	Q90:Contributed money to party,candidate	.233	.023	.020	.728	1.374
	Q12:Value being American	.051	.043	.037	.847	1.181
	Q14:Value organizations	.180	.054	.047	.878	1.139
4	(Constant)					
	Ql04:Age	.254	.166	.144	.821	1.219
	Q105:Education	.290	.124	.107	.607	1.648
	Q107:Household income	.192	.014	.012	.689	1.451
	Q86:Voted in 2004 presidential election	.209	.021	.018	.800	1.250

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	Q84:Attended pol meeting, rally	.250	.230	.065	1.087	.278
	Q79:Perceived pol. knowledge	.173	.037	.268	4.640	.000
	Q90:Contributed money to party,candidate	.057	.242	.014	.236	.814
	Q12:Value being American	.050	.036	.077	1.405	.161
	Q14:Value organizations	.005	.029	.010	.174	.862
	Q50:Belong neighborhood associations	.174	.233	.040	.746	.456
	Q43:Belong charity, volunteer orgs	.255	.200	.072	1.280	.202
	Q44:Belong ethnic, racial orgs	.438	.320	.074	1.368	.172
	Q46:Belong pol. clubs,orgs	.248	.288	.050	.859	.391

Coefficients[a]

Model		Correlations			Collinearity Statistics	
		Zero-order	Partial	Part	Tolerance	VIF
	Q84:Attended pol meeting, rally	.258	.062	.053	.659	1.518
	Q79:Perceived pol. knowledge	.435	.256	.225	.707	1.415
	Q90:Contributed money to party,candidate	.233	.013	.011	.685	1.461
	Q12:Value being American	.051	.080	.068	.794	1.259
	Q14:Value organizations	.180	.010	.008	.767	1.303
	Q50:Belong neighborhood associations	.166	.042	.036	.834	1.199
	Q43:Belong charity, volunteer orgs	.223	.073	.062	.748	1.336
	Q44:Belong ethnic, racial orgs	.148	.078	.066	.798	1.252
	Q46:Belong pol. clubs,orgs	.220	.049	.042	.683	1.465

a. Dependent Variable: POL_ENTH

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity . Tolerance
1	Q86:Voted in 2004 presidential election	.091[b]	1.652	.100	.092	.864
	Q84:Attended pol meeting, rally	.185[b]	3.549	.000	.195	.942
	Q79:Perceived pol. knowledge	.327[b]	5.938	.000	.316	.794
	Q90:Contributed money to party,candidate	.136[b]	2.541	.012	.141	.921
	Q12:Value being American	.024[b]	.452	.651	.025	.917
	Q14:Value organizations	.078[b]	1.441	.151	.081	.916
	Q50:Belong neighborhood associations	.126[b]	2.400	.017	.134	.956
	Q43:Belong charity, volunteer orgs	.140[b]	2.644	.009	.147	.935
	Q44:Belong ethnic, racial orgs	.157[b]	3.063	.002	.170	.987
	Q46:Belong pol. clubs,orgs	.182[b]	3.572	.000	.197	.989
2	Q12:Value being American	.050[c]	.954	.341	.054	.877
	Q14:Value organizations	.057[c]	1.121	.263	.063	.909
	Q50:Belong neighborhood associations	.053[c]	1.027	.305	.058	.893
	Q43:Belong charity, volunteer orgs	.098[c]	1.921	.056	.108	.905
	Q44:Belong ethnic, racial orgs	.101[c]	1.992	.047	.112	.922
	Q46:Belong pol. clubs,orgs	.089[c]	1.586	.114	.089	.760
3	Q50:Belong neighborhood associations	.064[d]	1.225	.221	.069	.869
	Q43:Belong charity, volunteer orgs	.099[d]	1.811	.071	.102	.793

Excluded Variables[a]

Model		Collinearity Statistics	
		VIF	Minimum Tolerance
1	Q86:Voted in 2004 presidential election	1.157	.706
	Q84:Attended pol meeting, rally	1.062	.712
	Q79:Perceived pol. knowledge	1.260	.670
	Q90:Contributed money to party,candidate	1.086	.717
	Q12:Value being American	1.091	.719
	Q14:Value organizations	1.092	.698
	Q50:Belong neighborhood associations	1.046	.721
	Q43:Belong charity, volunteer orgs	1.070	.704
	Q44:Belong ethnic, racial orgs	1.013	.728
	Q46:Belong pol. clubs,orgs	1.011	.729
2	Q12:Value being American	1.140	.642
	Q14:Value organizations	1.100	.631
	Q50:Belong neighborhood associations	1.120	.651
	Q43:Belong charity, volunteer orgs	1.105	.639
	Q44:Belong ethnic, racial orgs	1.085	.652
	Q46:Belong pol. clubs,orgs	1.316	.649
3	Q50:Belong neighborhood associations	1.150	.617
	Q43:Belong charity, volunteer orgs	1.261	.614

Excluded Variables[a]

Model		Beta In	t	Sig.	Partial Correlation	Collinearity . Tolerance
	Q44:Belong ethnic, racial orgs	.105[d]	2.021	.044	.114	.880
	Q46:Belong pol. clubs,orgs	.089[d]	1.575	.116	.089	.746

Excluded Variables[a]

Model		Collinearity Statistics VIF	Minimum Tolerance
	Q44:Belong ethnic, racial orgs	1.137	.615
	Q46:Belong pol. clubs,orgs	1.341	.611

a. Dependent Variable: POL_ENTH

b. Predictors in the Model: (Constant), Q107:Household income, Ql04:Age, Q105:Education

c. Predictors in the Model: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate, Q79:Perceived pol. knowledge

d. Predictors in the Model: (Constant), Q107:Household income, Ql04:Age, Q105:Education , Q84:Attended pol meeting, rally, Q86:Voted in 2004 presidential election, Q90:Contributed money to party,candidate,

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	Variance Proportions Ql04:Age	Variance Proportions Q105: Education
1	1	3.728	1.000	.00	.01	.00
	2	.166	4.735	.01	.36	.02
	3	.069	7.365	.09	.31	.40
	4	.037	10.087	.90	.32	.57
2	1	6.247	1.000	.00	.00	.00
	2	.853	2.706	.00	.00	.00
	3	.394	3.982	.00	.00	.00
	4	.169	6.076	.01	.27	.02
	5	.137	6.754	.00	.00	.01
	6	.099	7.962	.02	.23	.00
	7	.065	9.790	.13	.16	.42
	8	.035	13.329	.84	.33	.54
3	1	7.840	1.000	.00	.00	.00
	2	.923	2.914	.00	.00	.00
	3	.395	4.453	.00	.00	.00
	4	.252	5.574	.00	.00	.01
	5	.179	6.616	.01	.16	.02
	6	.139	7.504	.00	.01	.01
	7	.109	8.469	.01	.00	.00
	8	.075	10.254	.02	.74	.01
	9	.061	11.375	.05	.01	.53
	10	.027	17.186	.91	.08	.41
4	1	9.024	1.000	.00	.00	.00
	2	1.412	2.528	.00	.00	.00
	3	.824	3.309	.00	.00	.00
	4	.670	3.670	.00	.00	.00
	5	.482	4.325	.00	.00	.00
	6	.429	4.586	.00	.00	.00
	7	.373	4.919	.00	.00	.00
	8	.220	6.405	.00	.01	.01
	9	.164	7.418	.00	.17	.02
	10	.138	8.098	.00	.00	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Q107: Household income	Q86:Voted in 2004 presidential election	Q84:Attended pol meeting, rally	Q79:Perceived pol. knowledge	Q90: Contributed money to party, candidate
1	1	.01				
	2	.34				
	3	.63				
	4	.02				
2	1	.00	.00	.01	.00	.01
	2	.00	.00	.22	.00	.31
	3	.00	.00	.72	.00	.63
	4	.31	.04	.01	.04	.00
	5	.09	.82	.00	.13	.00
	6	.11	.10	.04	.73	.01
	7	.47	.03	.00	.09	.02
	8	.02	.00	.00	.01	.02
3	1	.00	.00	.00	.00	.00
	2	.00	.00	.21	.00	.29
	3	.00	.00	.67	.00	.65
	4	.07	.02	.01	.01	.00
	5	.22	.01	.03	.00	.00
	6	.03	.71	.00	.22	.00
	7	.17	.23	.06	.53	.03
	8	.11	.01	.00	.07	.02
	9	.39	.01	.00	.16	.00
	10	.01	.00	.00	.00	.01
4	1	.00	.00	.00	.00	.00
	2	.00	.00	.04	.00	.03
	3	.00	.00	.05	.00	.21
	4	.00	.00	.00	.00	.01
	5	.00	.00	.04	.00	.10
	6	.00	.00	.18	.00	.01
	7	.00	.00	.61	.00	.58
	8	.10	.03	.03	.00	.00
	9	.22	.01	.01	.02	.00
	10	.04	.72	.00	.20	.00

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions				
		Q12:Value being American	Q14:Value organizations	Q50:Belong neighborhood associations	Q43:Belong charity, volunteer orgs	Q44:Belong ethnic, racial orgs
1	1					
	2					
	3					
	4					
2	1					
	2					
	3					
	4					
	5					
	6					
	7					
	8					
3	1	.00	.00			
	2	.00	.01			
	3	.00	.00			
	4	.00	.78			
	5	.07	.16			
	6	.01	.00			
	7	.11	.00			
	8	.31	.01			
	9	.12	.02			
	10	.37	.02			
4	1	.00	.00	.00	.00	.00
	2	.00	.00	.04	.00	.10
	3	.00	.00	.01	.04	.40
	4	.00	.01	.81	.02	.06
	5	.00	.01	.01	.23	.35
	6	.01	.00	.00	.42	.03
	7	.00	.01	.02	.06	.01
	8	.01	.62	.07	.10	.00
	9	.04	.28	.01	.09	.00
	10	.01	.00	.01	.00	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance ... Q46:Belong pol. clubs,orgs
1	1	
	2	
	3	
	4	
2	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
3	1	
	2	
	3	
	4	
	5	
	6	
	7	
	8	
	9	
	10	
4	1	.00
	2	.11
	3	.01
	4	.03
	5	.39
	6	.40
	7	.02
	8	.01
	9	.01
	10	.00

Collinearity Diagnostics[a]

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions (Constant)	Ql04:Age	Q105: Education
	11	.105	9.259	.01	.01	.00
	12	.073	11.110	.02	.70	.02
	13	.060	12.290	.04	.01	.54
	14	.026	18.796	.92	.08	.40

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions Q107: Household income	Q86:Voted in 2004 presidential election	Q84:Attended pol meeting, rally	Q79:Perceived pol. knowledge	Q90: Contributed money to party, candidate
	11	.13	.21	.03	.58	.03
	12	.14	.01	.00	.04	.02
	13	.36	.00	.00	.16	.00
	14	.00	.00	.00	.00	.01

Collinearity Diagnostics[a]

Model	Dimension	Variance Proportions Q12:Value being American	Q14:Value organizations	Q50:Belong neighborhood associations	Q43:Belong charity, volunteer orgs	Q44:Belong ethnic, racial orgs
	11	.11	.01	.01	.01	.01
	12	.30	.02	.00	.02	.00
	13	.14	.01	.00	.01	.00
	14	.39	.03	.00	.00	.02

Collinearity Diagnostics[a]

Model	Dimension	Variance ... Q46:Belong pol. clubs,orgs
	11	.00
	12	.00
	13	.00
	14	.00

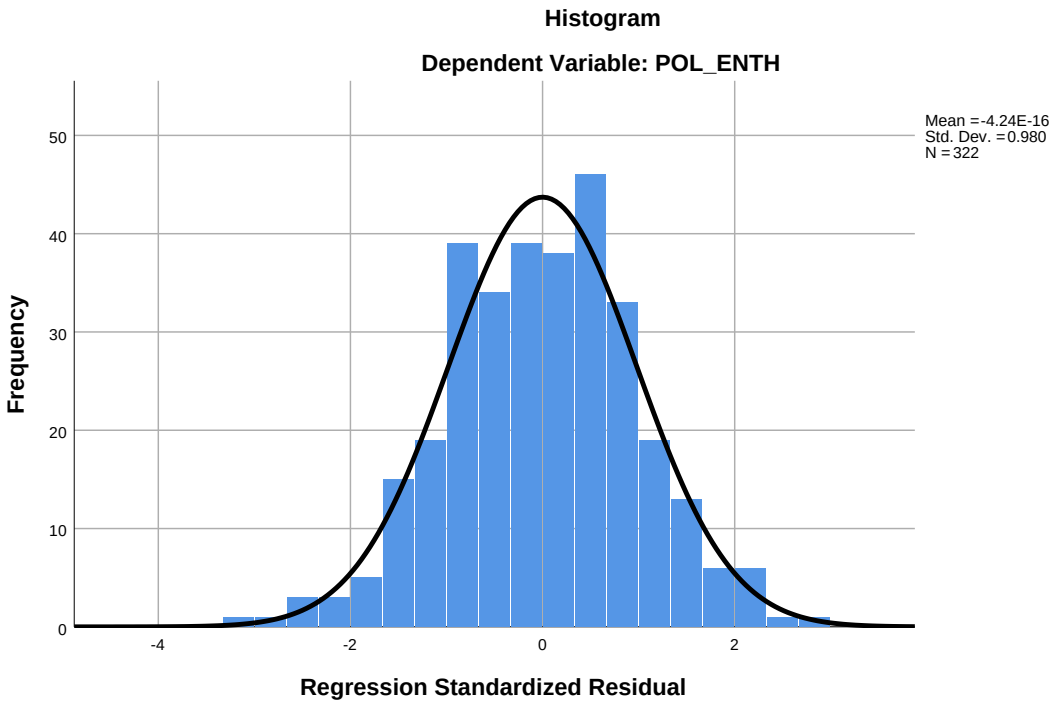
a. Dependent Variable: POL_ENTH

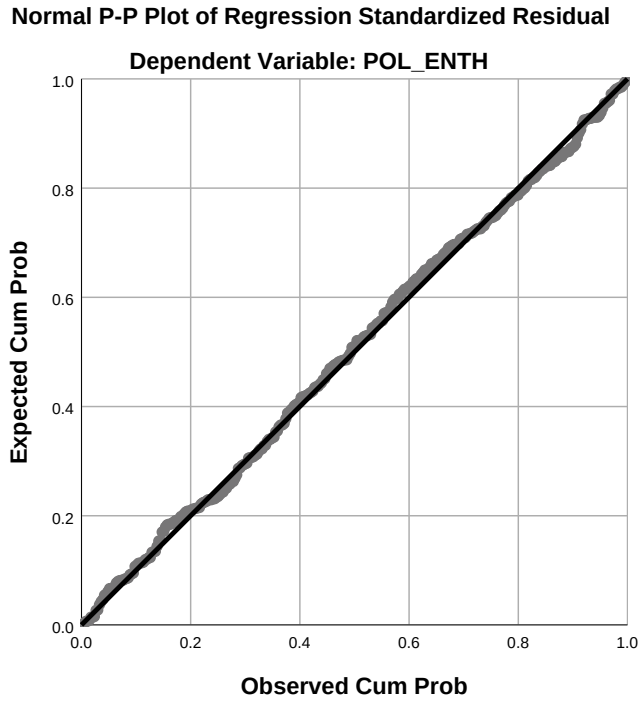
Residuals Statistics[a]

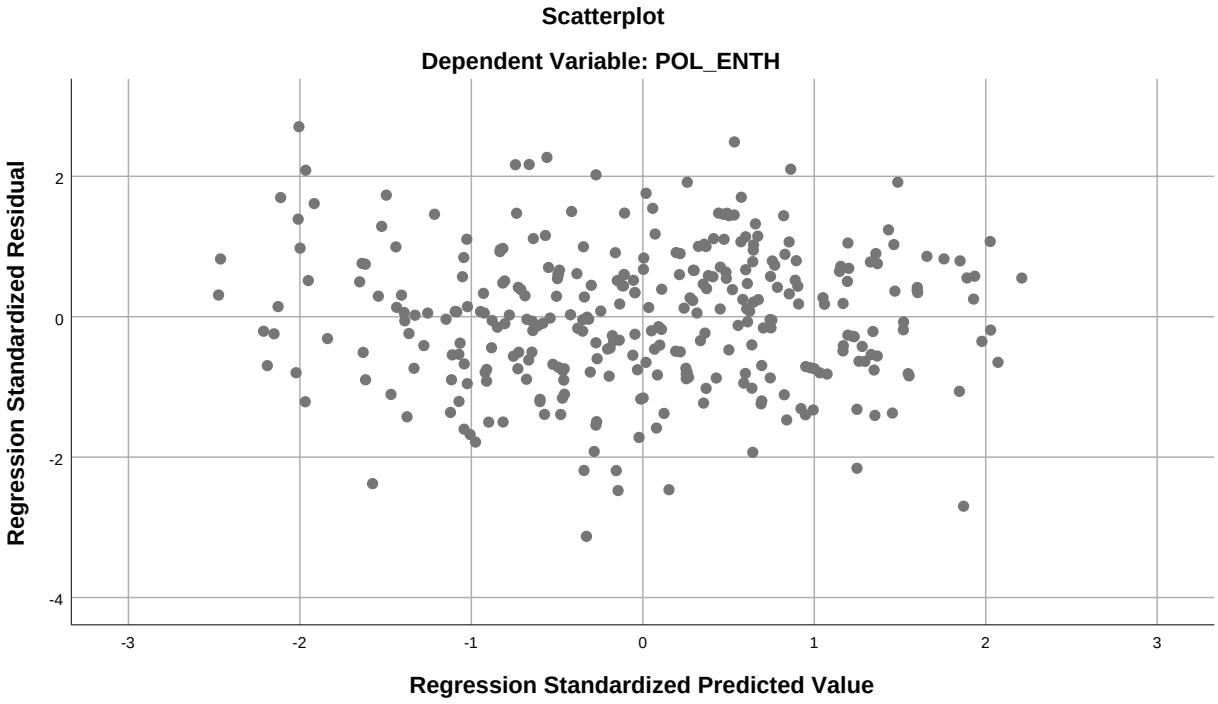
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	-2.2704	2.0551	.0142	.92327	322
Residual	-4.80052	4.15185	.00000	1.50296	322
Std. Predicted Value	-2.475	2.211	.000	1.000	322
Std. Residual	-3.129	2.706	.000	.980	322

a. Dependent Variable: POL_ENTH

Charts


Histogram
Dependent Variable: POL_ENTH
Mean =-4.24E-16
Std. Dev. =0.980
N =322
Frequency
50
40
30
20
10
0
-4
-2
0
2
Regression Standardized Residual


Normal P-P Plot of Regression Standardized Residual
Dependent Variable: POL_ENTH
Expected Cum Prob
1.0
0.8
0.6
0.4
0.2
0.0
0.0
0.2
0.4
0.6
0.8
1.0
Observed Cum Prob


Scatterplot
Dependent Variable: POL_ENTH
Regression Standardized Residual
2
0
-2
-4
-3
-2
-1
0
1
2
3
Regression Standardized Predicted Value